

BARTON-UPON-HUMBER URBAN DISTRICT COUNCIL

ANNUAL REPORT

of the

MEDICAL OFFICER OF HEALTH

and



Annual Report of the Public Health Inspector

1960

MEMBERS OF THE HEALTH COMMITTEE

Chairman - Councillor J. E. Brooks.

Vice-Chairman - Councillor J. J. Wood.

Councillors T. A. Ashby
J. E. Brooks
B. Foster
J. W. Franklin
E. Goodhand

Councillors E. Hastings
D. A. Newham
J. Richmond
J. F. Sutcliffe
J. J. Wood

Medical Officer of Health

J. S. Robertson M.B., M.R.C.S., D.P.H., D.I.H.

Office:- 50, Holydyke, Barton-on-Humber. (Tel. Barton-on-Humber 3154)

Clerks:- Mrs. M. H. Akester, Mrs. M. M. West.

Public Health Inspector

J. Kirk, M.R.S.H., M.A.P.H.I.

Office:- Council Offices, High Street, Barton-on-Humber.
(Tel. Barton-on-Humber 2135)

Clerk:- Mrs. M. Andrews.

Public Health Department,
50, Holydyke,
Barton-on-Humber.

July, 1961.

Mr. Chairman, Mrs. Goddard, Gentlemen,

For several years now the Perinatal Mortality Rate for Barton-on-Humber has been unduly high. From 1956 - 1958 we had an excess of stillbirths but a low infant mortality rate, and an investigation described in last year's report showed that the probable cause was a little known disease called Toxoplasmosis. Further investigations, described later in this report, have provided some more evidence in support of this view. In 1959 there was a marked change in the situation. The stillbirth rate fell dramatically but the infant mortality rate rose equally sharply. I regret that in 1960 the town again experienced excessive infant mortality, the stillbirth rate rising somewhat but remaining well below the figure for 1956 - 1958.

During 1960 expectant mothers were tested for toxoplasmosis, and post-mortem examinations were performed on all stillbirths with a view to ascertaining if toxoplasmosis was still prevalent in the district. The results of these investigations have been inconclusive. Although several mothers whose babies died showed rising dye test titres during pregnancy, the titres observed were much lower than those which one expects to find during active infection. Attempts to grow parasites from the brains and livers of stillborn babies were unsuccessful.

In our present state of knowledge it seems unlikely that the excessive infant mortality in 1959 and 1960 was related to toxoplasmosis. An attempt to investigate other possible causes is proposed, but this is likely to take some time to carry out.

Although the infant mortality rate is extremely high, we must bear it in mind that the actual numbers are quite small. There were in fact 9 infant deaths and 4 stillbirths in 1960 - a formidable proportion of the 111 total births registered in the year, but appreciably reduced if 3 of the infant deaths which could not fairly be related to any environmental influence in Barton-on-Humber are excluded. These three were premature twins born to a woman who had just arrived on a visit to relatives, and a child born in another part of the country to a woman who had left Barton before the start of her pregnancy, but gave a Barton address as her permanent residence. Although included in the figures for Barton-on-Humber these cases might more fairly be attributed to the environmental conditions in the places where

Public Health Department,
50, Holbyke,
Barton-on-Umber.

July, 1931.

Mr. Chairman, Mrs. Goddard, Gentlemen,

For several years now the Perinatal Mortality Rate for Barton-on-Umber has been unduly high. From 1928 - 1930 we had an excess of stillbirths but a low infant mortality rate, and an investigation described in last year's report showed that the probable cause was a little known disease called toxoplasmosis. Further investigations, described later in this report, have provided some more evidence in support of this view. In 1930 there was a marked change in the situation. The stillbirth rate fell dramatically but the infant mortality rate rose equally sharply. I report that in 1930 the town again experienced excessive infant mortality, the stillbirth rate rising somewhat but remaining well below the figure for 1928 - 1930.

During the year 1930-1931, 1000 were tested for toxoplasmosis, and post-mortem examinations of stillborn babies were made with a view to ascertaining if toxoplasmosis was still prevalent in the district. Although the results have been inconclusive, the fact that during pregnancy, the fetus observed were rising eye test titres during active infection. Attempts to grow parasites from the brains and livers of stillborn babies were unsuccessful.

In our present state of knowledge it seems unlikely that the excessive infant mortality in 1930 and 1931 was related to toxoplasmosis. An attempt to investigate other possible causes is proposed, but this is likely to take some time to carry out.

Although the infant mortality rate is extremely high, we must bear in mind that the actual numbers are quite small. There were in fact 9 infant deaths and 4 stillbirths in 1930 - a formidable proportion of the 111 total births registered in the year, but especially reduced if 3 of the infant deaths which could not fairly be related to any environmental influence in Barton-on-Umber are excluded. These three were premature twins born to a woman who had just arrived on a visit to relatives, and a child born in another part of the country to a woman who had left Barton before the start of her pregnancy, but gave a Barton address as her permanent residence. Although included in the figures for Barton-on-Umber these cases might more fairly be attributed to other areas.

<https://archive.org/details/b28906317>

the mothers lived during their pregnancies.

Even after the exclusion of these three infant deaths the infant and perinatal mortality rates for the town remain unsatisfactory, and suggest that some adverse environmental influence exists. Since of the six infant deaths remaining when these three are excluded, three were congenitally malformed (the causes of death in the remainder being prematurity and atelectasis) it is plain that whatever this factor may be it operates during the ante-natal period.

There were no deaths of children aged between 1 and 15 years during 1960, and 2 of the 5 deaths in persons aged between 16 and 50 were due to accidents. As usual the majority of deaths relate to elderly people. Cardio-vascular diseases, notably strokes, coronary diseases and other heart diseases, were responsible for more deaths than any other group of diseases. Between them these diseases account for about 50% of the deaths in the town, and they cause three times as many deaths as all the cancers together.

As I have remarked on previous occasions a great deal of research into the causes of cardio-vascular diseases has been undertaken in recent years. Statistical relationships have been established between them and a variety of factors, some of which are suspected to be contributory causes. Very recently a relationship has been demonstrated between softness of drinking water supplies and mortality from cardio-vascular diseases. This is of particular interest in view of the fact that we have recently installed equipment to soften our drinking water. The cause of this relationship is at present unknown, but surveys both in England and in America have shown that mortality from the cardio-vascular diseases is considerably higher in those towns supplied with soft water than in the towns with hard water supplies. It is possible that some substance present in hard water but absent from soft water may protect people against, or modify the course of cardio-vascular degenerations. Alternative explanations such as the possibility that some substance present in natural soft waters may cause cardio-vascular disease, that hard water might increase mortality from other causes or that occupational hazards in soft water areas are responsible, will have to be investigated. If it can be shown that it is the presence of calcium ions which is responsible for the lower mortality from cardio-vascular disease in hard water areas, our policy of softening water from 250 ppm to 50 ppm will have to be reconsidered.

The new table showing deaths by cause and age, which has been included in this year's report is based upon locally compiled statistics. The compilation of this table has been facilitated by the introduction of a punched card system of recording all

deaths registered. The differences between this table and that based upon the Registrar General's statistics are due to the fact that information given on death certificates is frequently inadequate for accurate classification. On some occasions special enquiries by the Registrar General's staff result in a death being attributed to a different cause from that suggested by the certificate, and occasionally information from other sources may influence the local assessment. Mechanisation of the Registrar's office has resulted in the former practice of checking such discrepancies being discontinued. Some differences between the two tables are therefore inevitable.

The age ranges used in this table correspond roughly to the pre-reproductive, reproductive and post-reproductive periods. The low mortality in childhood and during the reproductive period are due in great measure to the effects of heredity and natural selection. Persons with a hereditary susceptibility to a disease which is fatal in early life are unlikely to have children. Our population is descended from those who were able to survive the hazards of these early years, and benefits from the hereditary factors which contributed to this survival.

There were 6 fewer deaths in 1960 than in 1959, and 9 fewer births. Thus the "natural increase" in population due to the excess of births over deaths (27) was only 3 fewer than in 1959. Although the birth and death rates have been calculated on the basis of the Registrar General's estimated population for 1960 of 6,440, the preliminary report on the 1961 census suggests that this figure is an underestimate, for by early 1961 the town's population was 6,534. If the intercensal rise in population occurred at a steady rate the population in mid 1960 would have been about 6,550. The population increase is close to that which would have been expected to result from the "natural increase" and suggests that migration out of the town in search of employment has been balanced by migration into the town.

Infectious diseases caused three deaths during 1960, two of these being due to tuberculosis. Two new cases of tuberculosis were notified during the year. Of the 179 thirteen year old children attending schools in the town who were tested with a view to B.C.G. vaccination 33 (18.5%) were found to be tuberculin positive. This is a higher proportion than has been found in schools in adjacent districts. Although this is the first time for several years that we have had deaths from tuberculosis it is plain that this disease is still a real danger. B.C.G. vaccination is known to be effective in preventing tuberculosis and full use should be made of the scheme whereby children are protected before leaving school.

Each year there are two or three new cases of tuberculosis reported in the town. This indicates that there must be unsuspected

open cases in the community. More extensive use of Mass Radiography might help in tracing these if combined with careful contact tracing. Everyone who has a persistent cough should be encouraged to attend for X-ray on each visit of the unit. It is far better to find out early, and receive treatment, than to wait until the disease becomes extensive.

Total notifications of infectious disease in 1960 were 16 compared with 172 in 1959. The difference between the two years was due to the fact that in 1959 there was a measles epidemic with 162 cases. Only two cases of measles were notified in 1960. We may expect another measles epidemic in 1961 since this disease normally becomes epidemic alternate years.

There are a number of infectious diseases which although not notifiable might prove amenable to preventive measures. It became apparent during 1960 that cases of one of these diseases, a form of Brucellosis, had probably been occurring in the town. During the course of the Toxoplasmosis survey, blood specimens were tested for Brucella agglutination in addition to toxoplasma dye testing. High titres were found in a few blood specimens from both adults and children. In the case of the infants aged 1 - 4 years this was of particular interest because only heat treated milk, which should not transmit this infection, had been available during their lifetime. Altogether 10 of these children were found to have positive Brucella agglutination tests, four of them at titres in excess of 1/160. Two of them had histories of symptoms suggestive of undulant fever. Detailed inquiry showed that all consumed pasteurised milk from the same dairy, four had never consumed milk from any other source, and only one had ever consumed milk which had not been heat treated. Only one had ever had contact with cattle, and one had been in contact with a goat. How these children may have acquired this infection remains a mystery. Specimens of milk from the dairy supplying them have been uniformly excellent, and the possibility that Brucellosis can be transmitted in some other way, such as by undercooked beef, will have to be considered. It is hoped that by making the disease notifiable it may be possible to hear of cases soon enough for the necessary detailed history to be obtained and the means of transmission determined. Regrettably the symptoms of Brucellosis are so vague that cases may well not be recognised. The commonest symptoms are weakness, sweats, chills, poor appetite, generalised aching, and headache. These may often be ascribed to other causes ranging from "flu" to "nerves". The disease often lasts for several months or occasionally for years, and may cause much unhappiness. We should, therefore, do all in our power to prevent it.

Swimming Bath.

The voluntary effort towards providing a Public Swimming Bath for the town was intensified following two drowning accidents involving young boys in 1959. During 1960 large sums of money were raised by a number of special events. Consequently it should soon be possible to build a bath. Provision of a swimming bath, however, does not eliminate all danger from drowning. Occasional drowning accidents occur even in swimming baths where attendants are present. Young fit people who take a number of deep breaths before diving or swimming under water occasionally lose consciousness and drown. It is believed that this is the result of forced breath holding after "overbreathing". When consciousness is lost water may be inhaled into the lungs. If this occurs with fresh water, the water passes straight into the blood diluting the normal salt content of the blood. Experimental work with dogs has shown that this causes ventricular fibrillation and immediate death from heart failure. Consequently recussitation by "artificial respiration" is impossible. When salty water is inhaled, however, the heart is not affected and artificial respiration if performed in time leads to complete recovery. The amount of salt which has to be added to water to make it safe in this way is very small. The ideal concentration of 0.9 per cent is far less than the amount in sea water. By providing such slightly salty water in the bath the chance of effective recussitation in the event of a drowning accident can be greatly increased. The Swimming Bath Committee has, of course, been informed of these facts, which are mentioned here because parents and children might find the information useful in deciding where to bathe when on holiday. It would be wise to discourage deep breathing before plunging and underwater swimming in fresh water.

Water.

We are fortunate in this district in having a water supply which is adequate even in time of drought. Being drawn from a deep well and a deep bore in the chalk the water is initially very hard. It is of good quality bacteriologically as a rule, but owing to the lack of impervious cover and the fissured nature of the chalk it is liable to occasional bacterial pollution. In order to overcome these two faults the water is treated before distribution. The hardness is reduced by means of base exchange water softening plant which removes calcium ions from the water, and substitutes sodium ions. The risk to health which would result from the intermittent pollution is eliminated by treating the water with chlorine. That this is effective is shown by the results of the weekly bacteriological examinations. On all fifteen occasions during 1960 when coliform organisms were present

in the raw water the sample of treated water taken at the same time was free from bacteria. The softening plant is very effective also, for the water which has passed through it is virtually of zero hardness. In order to avoid risk of the water dissolving lead from pipes and causing lead poisoning it is necessary to mix a proportion of unsoftened water with that which has been softened. The water which is distributed is of 50 to 70 ppm hardness. Chemical analyses of raw and treated water are included elsewhere in this report, and indicate a water of excellent quality. The table of bacteriological examinations is included in the Public Health Inspector's report, and shows that it is rare for pollution to occur. Although organisms were reported present in 15 out of 93 samples of raw water they were usually only found in small numbers, and only on 4 occasions were B Coli type 1, (organisms of faecal origin) present. The treated water was invariably free from organisms.

The Mortuary.

The work of improving the mortuary was virtually completed in 1960, and has resulted in a very great improvement. Although the premises are small, by providing nesting trolleys it has been possible to make provision for three bodies to be accommodated.

Sewage.

The town's sewerage arrangements remain highly unsatisfactory. The new scheme which has been in hand now for several years was submitted to the Ministry during 1960. Since the end of the year the local enquiry has been held. We are now awaiting Ministry approval of the revised scheme.

Further progress was made with slum clearance during 1960, and the increased use of standard and improvement grants should reduce the future needs for such action. Many houses in the town, however, still lack such amenities as hot water systems and baths, and it is hoped that property owners will make even more use of these grants in future.

During 1960 the Council reversed a former decision and rehoused a "problem" family. The degree to which this family has been rehabilitated has amply justified their decision. Many unsatisfactory tenants and families with problems can be helped

if provided with satisfactory houses and given adequate social support. Because of the effect on the children, and hence upon future generations, such rehabilitation is extremely valuable. In this connection the work of the Salvation Army, who have provided material help and social support for a number of these families during the year, deserves the highest praise. Their work has been of great value, both within and without the town.

Mr. Kirk has maintained a 100% meat inspection service during the year, and has continued the weekly sampling of water, and regular sampling of ice-cream in addition to all his other duties under the Public Health and Housing Acts. I am indebted to him for his co-operation, and commend to your notice his report on the work carried out during 1960, which occupies the later pages of this report.

I am,

Your obedient Servant,

J. S. Robertson.

Medical Officer of Health.

- 3 -

VITAL STATISTICS

	<u>1958</u>	<u>1959</u>	<u>1960</u>
Mid Year Populations.	6410	6420	6440
Live Births.	95	116	107
Stillbirths.	6	1	4
Infant Deaths under 4 weeks of age.	0	5	8
Total Deaths.	77	86	80

	<u>Legitimate</u>			<u>Illegitimate</u>			<u>Total</u>
	<u>Male</u>	<u>Female</u>	<u>Total</u>	<u>Male</u>	<u>Female</u>	<u>Total</u>	
Live Births.	54	59	103	2	2	4	107
Stillbirths.	4	-	4	-	-	-	4
Deaths of Infants under 1 week of age.	4	-	4	1	2	3	7
Infant Deaths under 4 weeks of age.	5	-	5	1	2	3	8
Infant Deaths under 1 year of age.	5	1	6	1	2	3	9

	<u>Barton-on-Humber</u> <u>1960</u>	<u>1959</u>	<u>England & Wales</u> <u>1959</u>
Crude Birth Rate (per 1,000 pop.)	16.6	18.1	16.5
+ Corrected Birth rate (per 1,000 pop.)	16.9	18.4	(16.5)
Stillbirth rate (per 1,000 <u>Total</u> births)	36.0	8.55	21.0
Infant Mortality rate (per 1,000 live births)	84.1	77.6	22.0
Legitimate Infant Mortality rate (per 1,000 live births)	53.3		22.0
Neonatal Mortality rate (per 1,000 live births)	74.8	43.1	15.9
Perinatal Mortality rate (per 1,000 <u>total</u> births)	99.1	51.2	34.0

	<u>Barton-on-Umber</u> <u>1960</u>	<u>1959</u>	<u>England & Wales</u> <u>1959</u>
Illegitimacy Rate. (per 100 total live births)	3.74	4.3	5.1
Crude Death Rate (per 1,000 pop.)	12.4	13.4	11.6
+ Corrected Death Rate	11.7	12.7	(11.6)

+ These corrections take account of the different proportions of old and young people in the area, and make the corrected rate comparable with that for England and Wales and the correct rates for other areas. Without such correction health resorts to which old people retire would show alarmingly high death rates, and low birth rates. The comparability factors used to calculate these rates are for Barton 1.02 for births and 0.94 for deaths.

CAUSES OF DEATH IN THE DISTRICT DURING THE
YEAR 1960

This table gives the causes of death in accordance with the abbreviated list of 36 groups of the World Health Organisation Nomenclature Regulations, 1948.

Causes of Death					Male	Female
1.	Tuberculosis, respiratory	..	..	..	1	-
2.	Tuberculosis, other..	..	..	..	-	1
3.	Syphilitic disease	..	..	..	-	-
4.	Diphtheria	..	..	..	-	-
5.	Whooping Cough	..	..	..	-	-
6.	Meningococcal infections	..	..	..	-	-
7.	Acute Poliomyelitis	..	..	..	-	-
8.	Measles	..	..	..	-	-
9.	Other infective and parasitic diseases.				-	1
10.	(Malignant neoplasm, stomach	..	..		-	-
11.	(Malignant neoplasm, lung, bronchus.				5	-
12.	* (Malignant neoplasm, breast	..	..		-	1
13.	(Malignant neoplasm, uterus	..	..		-	2
14.	(Other Malignant & Lymphatic neoplasms.				2	5
15.	Leukaemia, aleukaemia	..	..	..	-	-
16.	Diabetes	..	..	..	-	-
17.	Vascular lesions of nervous system				4	9
18.	Coronary disease, angina	..	..	..	8	3
19.	Hypertension with heart disease	..	..		2	2
20.	Other heart disease	..	..	..	5	4
21.	Other circulatory disease	..	..	..	1	2
22.	Influenza	..	..	..	-	-
23.	Pneumonia	..	..	..	-	1
24.	Bronchitis	..	..	..	2	-
25.	Other diseases of the respiratory system.				-	1
26.	Ulcer of the stomach and duodenum				-	-
27.	Gastritis, enteritis and diarrhoea				-	1
28.	Nephritis and nephrosis	..	..	..	1	-
29.	Hyperplasia of prostate	..	..	..	2	-
30.	Pregnancy, childbirth and abortion				-	-
31.	Congenital malformations				2	2
32.	Other defined and ill-defined diseases.				6	2
33.	Motor vehicle accidents	..	..	..	-	1
34.	All other accidents	..	..	..	1	-
35.	Suicide	..	..	..	-	-
36.	Homicide and operations of war	..	..		-	-
Total:					42	38

* Malignant neoplasm means cancer.

CAUSES OF DEATH AT VARIOUS PERIODS OF LIFE.

								<u>Age in years.</u>			
								0-1	1-14	15-49	50+
<u>Infectious Diseases.</u>											
Tuberculosis, respiratory	..	..	..	..	..	..	..	-	-	-	1
Tuberculosis, other	..	..	..	..	..	..	..	-	-	-	1
Syphilitic disease	..	..	..	..	..	..	..	-	-	-	-
Diphtheria	..	..	..	..	..	..	..	-	-	-	-
Whooping Cough	..	..	..	..	..	..	..	-	-	-	-
Meningococcal infections	..	..	..	..	..	..	..	-	-	-	-
Acute Poliomyelitis	..	..	..	..	..	..	..	-	-	-	-
Measles	..	..	..	..	..	..	..	-	-	-	-
Other	..	..	..	..	..	..	..	-	-	-	1
<u>The Cancers.</u>											
Stomach	..	..	..	..	..	..	..	-	-	-	-
Lung and Bronchus	..	..	..	..	..	..	..	-	-	-	5
Breast	..	..	..	..	..	..	..	-	-	-	1
Uterus	..	..	..	..	..	..	..	-	-	-	2
Other	..	..	..	..	..	..	..	-	-	1	6
Leukaemia, Aleukaemia	..	..	..	..	..	..	..	-	-	-	-
<u>Diabetes</u>											
Diabetes	..	..	..	..	..	..	..	-	-	-	-
<u>Cardiovascular Diseases.</u>											
Vascular lesions of nervous system	..	..	..	..	..	..	..	-	-	1	13
Coronary disease, angina	..	..	..	..	..	..	..	-	-	-	10
Hypertension with heart disease	..	..	..	..	..	..	..	-	-	-	2
Other heart disease	..	..	..	..	..	..	..	-	-	-	13
Other circulatory disease	..	..	..	..	..	..	..	-	-	-	2
<u>Respiratory Diseases.</u>											
Influenza	..	..	..	..	..	..	..	-	-	-	-
Pneumonia	..	..	..	..	..	..	..	-	-	1	1
Bronchitis	..	..	..	..	..	..	..	-	-	-	2
Other	..	..	..	..	..	..	..	-	-	-	-
<u>Ulcer of the stomach and duodenum</u>											
Ulcer of the stomach and duodenum	..	..	..	..	..	..	..	-	-	-	-
Gastritis, enteritis and diarrhoea	..	..	..	..	..	..	..	-	-	-	-
Nephritis and nephrosis	..	..	..	..	..	..	..	-	-	-	2
Hyperplasia of prostate	..	..	..	..	..	..	..	-	-	-	3
Pregnancy, childbirth and abortion	..	..	..	..	..	..	..	-	-	-	-
Congenital malformations	..	..	..	..	..	..	..	4	-	-	-
Other diseases	..	..	..	..	..	..	..	5	-	-	1
Motor vehicle accidents	..	..	..	..	..	..	..	-	-	1	-
All other accidents	..	..	..	..	..	..	..	-	-	1	-
Suicide	..	..	..	..	..	..	..	-	-	-	-
Homicide and operations of war	..	..	..	..	..	..	..	-	-	-	-

TABLE OF NOTIFICATIONS OF INFECTIOUS AND OTHER DISEASES
BY AGE GROUPS.

DISEASE	0+	1+	2+	3+	4+	5+	10+	15+	25+	45+	65+	Total
Measles (exc.rubella)	-	-	1	-	-	1	-	-	-	-	-	2
Whooping Cough	-	1	-	-	-	1	-	-	-	-	-	2
Scarlet Fever	-	-	-	-	-	-	-	-	-	-	-	-
Ac. Poliomyelitis (P)	-	-	-	-	-	-	-	-	-	-	-	-
Ac. Poliomyelitis (N.P.)	-	-	-	-	-	-	-	-	-	-	-	-
Smallpox	-	-	-	-	-	-	-	-	-	-	-	-
Diphtheria	-	-	-	-	-	-	-	-	-	-	-	-
Dysentery	-	-	-	1	1	6	1	-	1	-	-	10
Meningococcal Infection	-	-	-	-	-	-	-	-	-	1	-	1
Ac. Pneumonia	-	-	-	-	-	-	-	-	-	-	-	-
Ac. Encephalitis (Inf.)	-	-	-	-	-	-	-	-	-	-	-	-
Ac. Encephalitis (Post Inf.)	-	-	-	-	-	-	-	-	-	-	-	-
Enteric Fever	-	-	-	-	-	-	-	-	-	-	-	-
Paratyphoid Fever	-	-	-	-	-	-	-	-	-	-	-	-
Erysipelas	-	-	-	-	-	-	-	-	-	-	-	-
Food Poisoning	-	-	-	-	-	-	-	-	-	-	-	-
Tuberculosis Resp.	-	-	-	-	-	-	-	-	-	-	-	-
Tuberculosis Meninges & C.H.S.	-	-	-	-	-	-	-	-	-	-	-	-
Tuberculosis Other	-	-	-	-	-	-	-	-	-	1	-	1
Total:	-	1	1	1	1	3	1	-	1	2	-	16

FOOD AND DRUGS ACT.

I am indebted to the County Medical Officer and County Public Health Inspector for the following details of samples of food taken for chemical analysis.

<u>Type of Food.</u>	<u>Number of Samples Analysed</u>
1. Milk	5
2. Processed Milk Products (including cream, butter and ice cream)	1
3. Edible fats and oils	1
4. Preserves	-
5. Tinned, bottled, preserved and dried foods	1
6. Alcoholic beverages	1
7. Non-alcoholic beverages	3
8. Sugars from confectionery	-
9. Meat and Fish products, not included in (5)	6
10. Vinegars, pickles, sauces, spices, flavourings and essences	1
11. Cereal products	1
12. Miscellaneous	-
13. Medicines and drugs	3

Total:	<u>23</u>

Samples found unsatisfactory.

One sample of potted beef contained excessive moisture, and a warning was issued to the vendor/manufacturer concerned.

Samples of Milk - taken during delivery for phosphatase and methylene blue tests.

Tuberculin tested milk (Pasteurised)	60
Pasteurised milk	5
Sterilised milk	11

All samples passed the tests, indicating that the heat treatment provided was satisfactory.

CHEMICAL ANALYSES OF WATER FROM BARTON BORE.

	<u>Raw water</u>	<u>Softened water</u>
Appearance	clear and bright	clear and bright
Colour	colourless	colourless
Taste	normal	normal
Smell	none	none
Reaction, pH Value	7.4	7.4
Ammoniacal Nitrogen as N ...	0.004 ppm	0.003 ppm.
Albuminoid Nitrogen as N ...	0.014 "	0.043 "
Nitrous Nitrogen as N ...	None	None
Nitric Nitrogen as N	9.0 "	8.5 "
Hardness (Calculated from Mineral Analysis) as CaCO ₃ .	324.4 "	66.1 "
Temporary	207.1 "	66.1 "
Permanent	117.3 "	Nil
Permanganate Figure (4 hours at 30°F) as O	0.28 "	0.28 "
Alkalinity as CaCO ₃	207.1 "	222.1 "
Total Solids dried at 130°C.	420.0 "	450.0 "
Silica as SiO ₂	6.0 "	5.0 "
Alumina and Iron Oxide	1.0 "	1.0 "
Calcium as Ca	120.0 "	25.3 "
Magnesium as Mg	6.0 "	0.4 "
Sodium as Na	14.61 "	140.05 "
Carbonates as CO ₃	124.2 "	133.2 "
Nitrates as NO ₃	39.3 "	37.6 "
Chlorides as Cl	32.0 "	34.0 "
Sulphates as SO ₄	68.9 "	67.5 "
Iron as Fe	0.02 "	0.06 "
Fluorine as F by the distillation method ...	0.11 "	0.11 "

Probable composition of Mineral constituents.

Silica	6.00 ppm	5.00 "
Alumina and Iron Oxide	1.00 "	1.00 "
Calcium Carbonate	207.14 "	64.44 "
Calcium Sulphate	97.64 "	-----
Calcium Chloride	23.05 "	-----
Magnesium Carbonate	-----	1.39 "
Magnesium Chloride	23.19 "	-----
Magnesium Nitrate	0.49 "	-----
Sodium Carbonate	-----	165.30 "
Sodium Sulphate	-----	99.82 "
Sodium Nitrate	54.00 "	51.55 "
	<u>412.51</u>	<u>444.55</u>

PARTICULARS OF IMMUNISATIONS AND VACCINATIONS CARRIED
OUT IN THE AREA DURING 1960.

Type of Immunisation or Vaccination.	Under 1	1 - 4	5 - 14	15 or over	Total
Diphtheria & Whooping Cough Immunisation.	-	-	1	-	1
Diphtheria, Tetanus and Whooping Cough Immun- isation.	64	49	1	-	114
Diphtheria, Tetanus Immunisation.	-	-	-	-	-
Whooping Cough Immunisation.	-	-	-	-	-
Whooping Cough and Tetanus Immunisation.	-	-	-	-	-
Smallpox Vaccination.	49	4	5	5	63
Smallpox Re-Vaccination.	-	-	-	6	6
Tetanus Vaccination.	-	-	6	3	9
Tetanus Booster.	-	-	-	-	-
Diphtheria alone (Primary)	1		9		
Diphtheria Booster	74				

Heaf Tests and B.C.G. Vaccinations in children from Barton-on-Humber and surrounding districts attending Secondary Schools in Barton-on-Humber.

<u>No. of Children</u> <u>Heaf Tested.</u>	<u>No. found</u> <u>positive.</u>	<u>No. found</u> <u>negative.</u>	<u>Number</u> <u>Vaccinated.</u>
179	33	146	146

STATISTICS AND GENERAL INFORMATION.

Population (1961 census)	6,584
Area of town	6,434 acres of land and inland waters 838 acres tidal waters
Rateable value 1960 - 61	£263,264
Product of a penny rate	£253. 7s. 11d.
Number of inhabited houses	2,333

The principal industries are the manufacture of bicycles, ropes, chemicals, bricks, tiles and malt. There are also a shipyard and an instrument making firm, and a number of smaller undertakings.

A number of residents in the town work at a cement works just outside the district, and some travel to Scunthorpe to work in the steel industry.

Health Services.

General Practitioner Service.

The town and surrounding villages are served by a group practice of 6 doctors who have built a modern suite of surgeries in the centre of Barton. This unit contains a "casualty" room, four consulting rooms, two examination rooms, a dispensary and an office, in addition to a spacious waiting room.

Hospital Services.

There is no hospital in the town. Patients requiring hospital treatment have to travel either to Scunthorpe or Grimsby to General Hospitals or Infectious Diseases Hospitals. Maternity beds and geriatric beds are provided at Scunthorpe, Grimsby and Brigg. The nearest Mental Hospital is situated just outside Lincoln.

Local Authority Health Services.

A midwife/home nursing service is provided by the Lindsey County Council, two nurses being resident in the town. Two Health Visitor/School Nurses who cover the town are based on the Clinic at 50, Holydyke. Infant Welfare and School Minor Ailment Clinics are held at the Clinic each week.

Ante-natal clinics, and Ophthalmic clinics for school children are also held twice monthly at the County Council clinic by consultants from the hospital service.

A school and family Psychiatric Service has been started jointly by the Lindsey County Council. In view of the difficulty experienced by Barton residents in travelling to Scunthorpe, the Child Psychiatrist visits the Clinic in Holydyke twice per month for consultations.

Investigation of Toxoplasmosis in Barton-on-Humber.

1) Survey of Infants.

Last year I reported the results of an investigation which suggested that toxoplasmosis was the probable cause of the excess of stillbirths in the town in 1956, 1957 and 1958. It seemed likely that if this disease had been so prevalent a proportion of the live-born children might also be affected, some might have died of toxoplasmosis, and others might develop fits, eye disease or become mentally retarded. There was also a possibility that treatment of infected children with active disease might arrest the disease and prevent more serious sequelae. It was, therefore, decided to identify and trace the 300 children who had been born during 1956-1958 and invite them to attend special clinics so that specimens of blood could be taken and sent to Sheffield for Toxoplasma dye tests.

When the children who had died, and those who had left the district to live elsewhere were excluded 235 children remained. In a few instances parents were unwilling for their children to be tested, but during the course of 1960 over 190 of these infants attended clinics for blood tests. A few specimens were damaged or lost in transit, and no attempt was made to take further specimens from children where this occurred. By the end of 1960, however, dye test results were available on 171 specimens of blood from Barton-on-Humber infants. In addition, most of the specimens were also tested for agglutinins to Brucella Abortus, the other disease which had been suspected as a possible cause of stillbirth.

Workers in other parts of the world have shown that it is rare for a child below the age of 5 to have either a positive dye test for toxoplasmosis, or a positive skin test.

I Previous Surveys for comparison with the Barton-on-Humber results

Skin Test Surveys.

Age in years	0 - 4	5 - 9	10 - 19	20 - 29	30 - 39
Cincinatti (Feldman)	0	5%	12%	24%	48%
Cincinatti (Feldman & Sabin)	0	5%	14%	20%	50%
Syracuse (Feldman)	0	3%	42%	47%	62%

Dye Test Survey (Dr. O. Thalhammer).

Age in years	0 - 1	2 - 5	6 - 10	11 - 14
Vienna (normal)	0	1.7%	9.2%	14.3%
Vienna (cerebral defective)	17%	17%	29%	27%

The proportion of children in Barton-on-Humber who gave positive tests is extremely high. On the basis of levels found elsewhere one would have expected to find between 1 and 2 per cent positive only. In fact more than 25% of the children tested had positive dye tests!

II Dye Test Survey Barton-on-Humber.

Year of birth	-ve	$\frac{1}{4}$	$\frac{1}{8}$	$\frac{1}{16}$	$\frac{1}{32}$	$\frac{1}{64}$	Tot. +ve	Total	% +ve
1 9 5 3	46	1	4	3	1	1	10	56	17.8
1 9 5 7	43	2	7	3	2	1	15	58	25.9
1 9 5 6	33	6	3	3	1	1	19	57	33.3
Total	127	9	19	9	4	3	44	171	25.7

Having found a number of children with evidence of past toxoplasma infection it was necessary to ascertain if any of these had active infections requiring treatment, if any had evidence of eye or brain damage due to congenital disease, or if they had merely undergone harmless acquired infections. None of the titres found were so high as to suggest active disease, but since it is not impossible for low titres to be present in active disease all children found to be positive were given appointments with an eye specialist and through the help of Dr. Stone were given appointments at hospital for skull x-ray examination. So far no x-ray evidence of brain damage has been found, and only one child has been found to have the typical kind of eye disease which is commonly caused by congenital toxoplasmosis. Analysis of the results of dye test according to year of birth shows that the incidence of positive test results rises with age in such a manner as to suggest that most of the children may have had post-natally acquired infections.

Incidence related to age.

	% +ve observed	% +ve expected if $p = 0.094$ [*]
After 2 years exposure to risk	17.3	17.9
After 3 years exposure to risk	25.9	25.6
After 4 years exposure to risk	33.3	32.6

It is known that such acquired infections are usually harmless, and there are good grounds for believing, therefore, that these children will prove not to have been damaged by the disease.

^{*} p = The probability of a child acquiring the infection in one calendar year.

Most of the titres found in this survey have been low; and the significance of such low titres is in dispute. No other agency than toxoplasmosis has yet been shown to be capable of causing a positive dye test, and in the past it has been assumed that low titres indicated infections which occurred many years previously. Such an explanation, however, is untenable when these low titres are found in children less than 2 years old, and an alternative hypothesis will have to be evolved and tested. Low titres comparable to mine have been found by Dr. Thalhammer in Vienna in children of comparable age with signs of brain damage which he attributes to congenital toxoplasmosis. This suggests that titres can fall much more rapidly after infection than was formerly believed. It is also possible that strains of the parasite which are adapted to some other animal and are not capable of harming man are eliminated from the body so quickly that only a small antibody response occurs. Such a hypothesis would explain many of the puzzling factors of the disease. The high virulence in congenital infections would be accounted for by the parasite becoming man-adapted during its passage through the mother, and the occasional severe infections of adults would be due to infection with a man-adapted parasite. There are a number of other possibilities however, and until much further work has been done it would be unwise to draw too many conclusions from the results of this survey.

It is clear that the incidence of infection with *Toxoplasma Gondii* has been exceptionally high in Barton-on-Humber in recent years, and this lends credibility to the suggestion that this disease caused our excess of stillbirths from 1956 - 1958. Present evidence suggests that most of the live children who have had the infection were unharmed by this experience and do not require treatment. A watch will be kept on them, however, so that should signs of active eye disease appear later, treatment can be instituted quickly and damage to vision minimised. To this end it is intended to test the vision of these children each year after they start school.

In order to throw further light upon the significance of these results and to see if the high risk of infection is still present, it is proposed to test blood from children born in 1959. Dr. Thalhammer has agreed to test some sera in order to see whether the results of tests at Sheffield and Vienna are comparable. He has also advised that the incidence of positive tests in children born in Brigg be ascertained, and "frequency of infection" graphs for the two towns be plotted and compared. It is hoped that this additional work will be done in 1961.

2) Tests of Expectant Mothers, and Mothers Whose Babies Died.

a. Infant Mortality 1956 - 1958.

Following the stillbirth investigation, the mothers whose babies died during 1956 - 58 were traced and tested. When compared with "controls" they were found to show an excess of positive reactions. Numbers are too small for any conclusions to be drawn but when added to the results of the stillbirth investigation the significance of these findings is increased.

	-ve	$\frac{1}{4}$	$\frac{1}{8}$	$\frac{1}{16}$	$\frac{1}{32}$	$\frac{1}{64}$	Total +ve	% +ve
Mothers whose infants died.	1	1	1	-	1	1	4	80
Control mothers	4	-	-	1	-	-	1	20

b. Infant Mortality in 1959.

In 1959 the stillbirth rate for the town fell sharply, but a considerable increase in infant deaths occurred. In order to see if this could have been due to toxoplasmosis, or whether the dramatic fall in the stillbirth rate indicated the end of the outbreak of this infection, the mothers of infants dying in 1959 were tested.

The results indicate that infant mortality in 1959 was unrelated to toxoplasmosis. Some of the infants died several months after birth, and in two cases the cause of death was inhalation of vomit. One infant died of meningo-encephalitis and one from congenital heart disease. The remaining five infant deaths occurred in the neonatal period, two as a result of congenital malformation, one from prematurity and one as a result of birth injury.

Apart from the possibility that bottle feeding with its attendant increased risk of gastro-enteritis may have been a contributory cause of the death from inhalation of vomit, it is difficult to suggest how these deaths could have been prevented. Breast feeding has many advantages and it is a pity that the current fashion is for women to put their babies on the bottle rather than persist with breast feeding.

Toxoplasma Dye Tests of Mothers Whose Infants Died in 1959.

	Tot. No.	-ve	$+\frac{1}{4}$	$+\frac{1}{8}$	$+\frac{1}{16}$	$+\frac{1}{32}$	Total +ve	% +ve
Mothers whose babies died in 1959.	9	5	3	-	1	-	4	44
Control mothers.	9	3	1	1	2	2	6	67

Tests of maternal specimens in relation to -

c. Perinatal Mortality in 1960.

During 1960 doctors were asked to submit specimens of blood from all expectant mothers for dye testing. Specimens were also requested post-natally if stillbirth or neonatal death resulted. In addition post-mortem examination of stillbirths was requested, and arrangements were made for specimens of brain and liver from stillborn babies to be sent to Sheffield for attempts at toxoplasma isolation by animal inoculation.

Results.

Toxoplasma Dye Test Titres - Maternal Blood.

	Tot. No.	-ve	$\frac{1}{4}$	$\frac{1}{8}$	$\frac{1}{16}$	$\frac{1}{32}$	$\frac{1}{64}$	Tot. +ve	% +ve
Ante-natal Tests	48	24	8	8	4	3	1	24	50
Post-natal Tests - Infant Deaths	3	2*	2	1	-	-	3	6	75
Stillbirths	4	2*	2	-	-	-	-	2	50

* One mother had twins - one dying before and one after birth. Her test was -ve and is included both as an infant death and as a stillbirth.

There were, during the year 4 stillbirths and 9 infant deaths all but one of which occurred in the neonatal period. In three instances where the baby died the mother had not been resident in Barton during pregnancy, and an environmental factor in Barton could hardly be held responsible in these instances. For this reason the cases are tabulated in two sections in order to separate those which could have been due to a local environmental cause.

Infant Deaths 1960

Group 1.

Children whose mothers resided in Barton-on-Umber during pregnancy.

	<u>Age at death</u>	<u>Cause</u>	<u>Ante-natal Dye Test</u>	<u>Post-natal Dye Test</u>
a.	1 month	Spina Bifida and Hydrocephaly.	Not tested	1/280
b.	1 day	Prematurity	1/12	1/75
c.	3 days	Prematurity	1/600 *	1/7
d.	8 hours	Atelectasis	1/13	1/30
e.	1 hour	Hydrocephaly and Prematurity.	-ve	-ve
f.	9 days	Congenital Heart Disease.	Not tested	1/12

* This high titre was found in 1959 when a specimen was tested in connection with a stillbirth in 1956. The falling titre indicates that the infection occurred some time prior to 1959, but whether it occurred in 1956 and caused the stillbirth one cannot say. Since this test was originally taken as a post-natal test in connection with one pregnancy and used as an ante-natal for the next it is not included in the ante-natal tests in the table. Inclusion of such tests several times would lead to bias. The ante-natal result for case "d" was a "control" post-natal blood and also excluded. Most authorities consider that toxoplasmosis only harms the baby which is in the uterus at the time the mother contracts her original infection, subsequent pregnancies being unharmed. Instances have been reported of repeated stillbirth prior to treatment for toxoplasmosis and normal live birth subsequent to treatment, and one worker suspects toxoplasmosis of causing recurrent stillbirth. No convincing evidence of this has yet been published, however, and we must assume on present evidence that such cases are due to coincidence.

Group 2.

Children whose mothers were not in Barton-on-Humber during pregnancy.

	<u>Age at death</u>	<u>Cause</u>	<u>Ante-natal Dye Test</u>	<u>Post-natal Dye Test</u>
g.	40 mins.	Anencaphaly	Not tested	-ve
h.	7 hours)	Premature twins	Not tested	1/7
i.	11 hours)			

It will be seen from the above that no conclusions can be drawn regarding the role of toxoplasmosis. Although the relatively low titres found and the failure to grow parasites from post-mortem material suggest that toxoplasmosis was probably not responsible, the incidence of positive tests, and the titres observed are higher than one would expect if the disease were unrelated to infant deaths. A rise in titre between ante-natal and post-natal test is suggestive of infection, but the rises noted were too small to be significant.

The numbers concerned are so small that only bacteriological proof of infection could be accepted as evidence that toxoplasmosis caused death. Such proof could be obtained by growing the parasite from foetal material, but often the material was so decomposed by the time it reached Sheffield that it was unsuitable for inoculating into animals, and parasites in it might have already been destroyed by autolysis. In no cases were toxoplasms found.

I should like to express here my thanks to all the general practitioners who have assisted in this work by taking and sending additional blood specimens, and to the mid-wives and the hospital staff who have arranged for post-mortem examinations, and completed questionnaires to provide me with details of each case. Their help has proved most valuable. I must also acknowledge my indebtedness to Dr. Cormac and to the Lindsey County Council for relieving me of certain other duties in order to make this work possible, and for permitting me to use clinic premises and staff. Finally my thanks are due to Dr. Stone, the paediatrician for advice and help, to Dr. Hopewell and Dr. Johnstone for undertaking post-mortem examinations and sending specimens to Sheffield, and to Dr. Beverley and Professor Beattie for doing the laboratory work.

Council Offices,
High Street,
Barton-upon-Humber.

June, 1961.

Mr. Chairman, Mrs. Goddard & Gentlemen,

The year 1960 was notable for the tangible progress that was made in so many different directions. In part, this has been due to the implementation of new and recent legislation but it is also a reflection of the Council's willingness to discharge its duties and functions in the best way possible when a need has been shown to exist.

The Council's report on slaughtering facilities was accepted by the Minister of Agriculture, Fisheries and Food during the year and the new requirements relating to hygiene and prevention of cruelty are providing a greatly improved standard of conduct and amenity in the premises continuing in use after the 1st October, 1961, when the regulations are fully operative in this district.

The Ministry's tuberculosis eradication scheme for cattle became effective on March 1st and produced remarkable results. Post-mortem inspection of 1,454 beef carcasses in Barton during the 3 years preceding the scheme had shown an average of 9.2% affected in some degree by tuberculosis but in the 3 months immediately following its inception only 3 carcasses were found to be slightly affected and none was found in the remaining 6 months of the year.

Adequate housing of the population, particularly in towns as old as Barton, requires continuous application of the wide range of powers provided by the Housing and Public Health Acts.

During 1960, 13 houses were made the subject of demolition or closing orders and the Council's proposals for dealing with 35 unfit houses in the 2 years commencing 1st July, 1961, were transmitted to the Ministry of Housing and Local Government. Repairs to 51 privately owned, tenanted houses were brought about by formal and informal action, it being necessary in one instance to institute proceedings against the owner concerned when a court order was obtained.

The advent of the standard grant system of house improvement, together with a protracted local publicity campaign involving the use of press, posters and the distribution of several hundred booklets, increased the numbers of approved applications from 16 in 1959 to 25 in 1960 with many more enquiries being made from prospective applicants than hitherto. An interesting feature of

this is that 15 of the 25 houses improved were tenanted, indicating greater willingness on the part of property owners to take advantage of the assistance available to them, and the Council also used the system for the first time in the installation of 76 wash basins to pre-war Council houses.

Every effort is made to retain the appearance and character of the town by offering improvement grant facilities in cases where unfit houses are capable of being saved, but where this is not possible and where the Council does not wish to purchase and improve such houses, demolition or closure becomes a necessity. It is my personal conviction that the standard of fitness and amenity of grant improved houses will, within the next 25 to 40 years, become the minimum standard permitted by a future Housing Act and local authorities who have used their existing powers fully will be well prepared for such an eventuality.

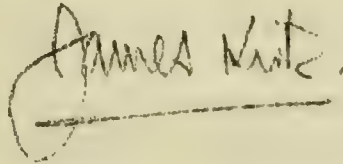
A weekly refuse collection service was maintained for the second year in succession in the town and, as a result of the increased number of earth-closet conversions in the previous year, a fortnightly collection was undertaken from dwellings in the outlying parts of the district where the occupiers required this service. A noteworthy improvement was made by the introduction of controlled tipping as the means of disposing of refuse and the benefits obtained were quickly apparent. The fly and rat population almost disappeared and their breeding habits are now kept under control by regular treatments with insecticide and poison bait. The outbreaks of fires ceased, making access safer, and the appearance of the site has improved immeasurably.

A free cesspool emptying service was started by the Council in June and 4 requests for this service received attention. The trade refuse collection arrangements were regularised when a standard charge for business premises of £1 per annum was instituted in October.

The inhabitants of Waterside Road and Chemical Road benefited greatly by the installation of a fully automatic, oil fired boiler at the nearby factory in place of 2 old boilers which were the source of many complaints. Pollution of the atmosphere had been aggravated by the use of one of these boilers for burning of waste materials and these are now baled on the premises and taken to the Council's tip for disposal.

In addition to the visits specifically mentioned in the remainder of this report, 915 were made for improvement grants, water samples, interviews, refuse collection and disposal, infectious disease prevention, etc. and a further 335 were made for the purpose of carrying out meat inspection.

New legislation issued during the year included the Noise Abatement Act, Offices Act, Caravan Sites and Control of Development Act, Food Hygiene (General) and (Docks and Carriers) Regulations, Milk (Special Designation) Regulations. One records with thankfulness that the issue of dealers licences under the Milk Regulations and certificates as to means of escape in case of fire under the Factories Act are now the responsibility of the County Council's officers, these functions having been transferred to that authority at the end of the year under review.

A handwritten signature in dark ink, appearing to read "James Nite", with a horizontal line drawn underneath the name.

Public Health Inspector.

1. HOUSING

The statistical details relating to dwellinghouses are as follows:-

Total number of new houses erected during the year ..	26
(a) By the Local Authority	0
(b) By other Local Authorities	0
(c) By other bodies or persons	26

Inspection of dwellinghouses during the year.

(i) (a) Total number of dwellinghouses inspected for housing defects (under Public Health or Housing Acts)	76
(b) Number of inspections made for the purpose	227
(ii) (a) Number of dwellinghouses (included under sub-head (i) above) which were inspected and recorded under the Housing Consolidated Regulations 1925	36
(b) Number of inspections made for the purpose	39
(iii) Number of dwellinghouses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	18
(iv) Number of dwellinghouses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation	54

Remedy of Defects during the year without the service of Formal Notice.

Number of defective dwellinghouses rendered fit in consequence of informal action by the Local Authority or their Officers	46
--	----

Action under Statutory Powers during the year.

(i) Proceedings under the Public Health Acts:-

(a) Number of dwellinghouses in respect of which notices were served requiring defects to be remedied ..	4
(b) Number of dwellinghouses in which defects were remedied after service of Formal Notices:-	
By owners	4
By Local Authority in default of owners	0

(ii) Proceedings under Section 9 of the Housing Act, 1957.

Number of dwellinghouses in respect of which notices were served requiring repairs	0
---	---

(iii) Proceedings under Sections 16 and 17 of the Housing Act, 1957.

(a) Number of dwellinghouses in respect of which Demolition Orders were made.. .. .	8
(b) Number of dwellinghouses demolished in pursuance of Demolition Orders	9
(c) Number of dwellinghouses subject to undertaking or Closing Orders	5

(iv) Proceedings under Section 42 of the Housing Act, 1957.

(a) Number of Clearance Orders made	0
(b) Number of dwellinghouses demolished in pursuance thereof.. .. .	13

Housing Acts 1949 and 1953 - Improvement Grants.

Twenty-five applications were approved during the year, 12 of which were standard grants and 13 discretionary grants.

2. FOOD INSPECTION AND FOOD PREMISES

Food Premises.

List of Food Premises in the district:-

<u>Type of Business</u>	<u>Number</u>	
Grocery and Provisions Shops.	27	
Butchers Shops.	8	- Registered under Section 16 of the F. & D. A. 1955.
Fish Shops.	5	
Bakehouses.	4	
Greengrocers Shops.	4	
Cafés.	3	
Sweet Shops, Chemists, etc.	19	
Licensed Premises.	15	
Ice Cream Vendors.	22	- Registered under Section 16 of the F. & D. A. 1955.

121 visits were paid to these premises. 54 contraventions were found and 14 defects were remedied.

14 ice cream samples were submitted for bacteriological examination, 9 of which were reported as being Grade I, 4 Grade II, 1 Grade III and 0 Grade IV.

Milk Supplies.

Number of Dealers Licences issued authorising the use of the Special Designation "Sterilised"	25
Number of Dealers Licences issued authorising the use of the Special Designation "Pasteurised"	3
Number of Supplementary Licences issued authorising the use of the Special Designation "Pasteurised" ..	3
Number of Supplementary Licences issued authorising the use of the Special Designation "Tuberculin Tested" (Pasteurised)	3

Meat Inspection.

Three private slaughterhouses are in operation.

The following table gives details of meat inspection work carried out during 1959.

Carcases Inspected and Condemned in Whole or in Part.

	<u>Cattle</u> <u>excl.</u> <u>Cows</u>	<u>Cows</u>	<u>Calves</u>	<u>Sheep</u> <u>and</u> <u>Lambs</u>	<u>Pigs</u>	<u>Horses</u>
Number Killed	427	0	0	655	1312	0
Number Inspected	427	0	0	655	1312	0
All diseases except Tuberculosis & Cysticerci:-						
Whole carcasses condemned	0	0	0	0	4	0
Carcases of which some part or organ was condemned						
	125	0	0	40	94	0
Percentage of number inspected affected with disease other than tuberculosis and cysticerci						
	29.3	0	0	6.1	7.4	0
Tuberculosis only:-						
Whole carcass condemned	1	0	0	0	0	0
Carcases of which some part or organ was condemned						
	12	0	0	0	60	0
Percentage of number inspected affected with tuberculosis						
	3.0	0	0	0	4.6	0

Carcases Inspected and Condemned in Whole or in Part (continued)

	<u>Cattle excl. Cows</u>	<u>Cows</u>	<u>Calves</u>	<u>Sheep and Lambs</u>	<u>Pigs</u>	<u>Horses</u>
Cysticercosis:-						
Carcases of which some part or organ was condemned	1	0	0	0	0	0
Carcases submitted to treatment by refrigeration	1	0	0	0	0	0
Generalised and totally condemned	0	0	0	0	0	0

Disposal of Condemned Foods.

Condemned meat is recovered from the slaughterhouse by the Health Department Staff and sold to a processor.

Small quantities of other foods which are condemned are buried in the Council's controlled tip.



Administration of the Factories Acts, 1937 and 1948.

3. 1. Inspection for the purposes of provisions as to health.

Premises	No. of Premises in Register	No. of Inspection	No. of Written Notices	No. of occupiers Prosecuted
(1) Factories in which Sections 1,2,3,4 and 6 are to be enforced by Local Authorities.	3	-	-	-
(11) Factories not included in (1) in which Section 7 is enforced by the Local Authority.	36	12	3	-
(111) Other premises in which Section 7 is enforced by the Local Authority (excluding Outworkers' premises)	2	2	-	-
Total:	41	14	3	-

2. Cases in which Defects were found.

Particulars	No. of Defects found	No. of Defects Remedied	No. of Defects Referred to by H.M.I. H.M.I.		No. of defects in respect of which prosecutions were instituted
Want of cleanliness (sec. 1)	-	-	-	-	-
Overcrowding (sec.2)	-	-	-	-	-
Unreasonable temperature (sec. 3)	-	-	-	-	-
Inadequate ventilation (sec. 4)	-	-	-	-	-
Ineffective drainage of floors (sec. 6)	-	-	-	-	-
Sanitary Conveniences (sec. 7)					
(a) Insufficient	-	1	-	-	-
(b) Unsuitable or defective	2	3	-	-	-
(c) Not separate for sexes	1	1	-	-	-
Other offences against the Act (not incl. offences relating to outwork)	-	-	-	-	-
Total:	3	5	-	-	-

Outwork - Sections 110 and 111.

No outworkers were reported in the Urban District during the year.

4. WATER SUPPLIES

No. of houses with main supply in house (estimated)	Population (estimated)	No. of houses served by stand pipes (estimated)	Population (estimated)
1887	5209	446	1231

Number of houses supplied from private sources:

in house 23

not in house. .. 9

Bacteriological Examination of Water Samples.

Group	Presumptive Coli Count	Private Supplies	Public Supply	
			Before Chlorination	After Chlorination
I	No Coliform organism/100 ml.	10	78	48
II	1 to 2 Coliforms/100 ml.	1	9	0
III	3 to 10 Coliforms/100 ml.	2	2	0
IV	More than 10 Coliforms/100 ml. or B Coli type 1 present	5	4	0

5. GENERAL SANITATION

Nuisances

Total number of nuisances during the year:-

(a) Abated as result of informal action by Public Health Inspector 44

(b) Report to Council - Statutory Notice issued 0

Details of Nuisances Abated:-

Foul ditches, ponds and stagnant water	...	...	...	1
Drainage...	...	...	...	34
Dangerous Premises	...	...	...	0
Miscellaneous Nuisances	...	...	...	9

Disinfection and Disinfestations

Rooms or premises disinfected - non Tuberculosis	...	...	0
Number of premises subject to disinfestation...	...	...	44

Sanitary Accommodation

Number of houses with pail closets in district	...	...	68
Number of pail closets renewed	...	...	3
Number of houses with water closets in district	...	...	2265
Number of water closets substituted for pail closets	...	...	12

Rodent Control

Details of the number of premises treated for rats and mice are shown below:-

Dwellinghouses	..	..	61
Other premises	..	..	19

Sewers in the district were treated on one occasion during the year.

-----oOo-----

